

CLAIMS

1. A lamp for a vehicle, comprising:
a housing having an opening through which light radiates;
5 a light-transmitting cover member which has a light incidence plane and a light exit plane, and is fixedly installed on the housing to hermetically cover the opening of the housing and provided with a lens pattern formed on the light incidence plane and/or the light exit plane so that radiating light can have a predetermined pattern;
a plate-shaped light guide panel which is installed within the housing, has a light
10 incidence plane defined at a side surface thereof to receive light and a light exit plane defined at a front surface thereof to face the cover member, and is provided with a scattering pattern for scattering light incident on the light incidence plane toward the light exit plane;
a light source installed adjacent to the light incidence plane of the light guide panel
15 to emit light to the light incidence plane of the light guide panel; and
a reflection plate installed on a rear surface of the light guide panel to reflect light toward the light exit plane of the light guide panel.
2. The lamp according to Claim 1,
20 wherein the lens pattern formed on the light incidence plane and/or the light exit plane of the cover member comprises a plurality of grooves each of which has a semicircular cross-section and a predetermined length.
3. The lamp according to Claim 1,
25 wherein the lens pattern formed on the light incidence plane and/or the light exit plane of the cover member comprises a plurality of protruding half cylinders each of which has a semicircular cross-section and a predetermined length.
4. The lamp according to Claim 1,
30 wherein the lens pattern formed on the light incidence plane and/or the light exit

- plane of the cover member comprises a plurality of hemispherical recesses.
5. The lamp according to Claim 1,
wherein the lens pattern formed on the light incidence plane and/or the light exit
5 plane of the cover member comprises a plurality of hemispherical protrusions.
6. The lamp according to Claim 1, further comprising:
a light-transmitting diffuser provided between the cover member and the light
guide panel to diffuse the light irradiated from the light exit plane of the light guide panel.
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7. The lamp according to Claim 1, further comprising:
a screen plate which takes the shape of a hoop with a predetermined width and is
provided between the cover member and the light source along an outer periphery of the
cover member so that the light source cannot be viewed through the cover member.
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8. The lamp according to any one of Claims 1 to 7,
wherein a portion of the light incidence plane of the cover member is formed with
a reflection pattern to reflect external light incident on the light exit plane of the cover
member.
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9. The lamp according to any one of Claims 1 to 7, further comprising:
an inverter for supplying electric power to the light source,
wherein the housing has an inverter-receiving space formed at a portion thereof
facing the reflection plate to receive the inverter.
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10. The lamp according to any one of Claims 1 to 7,
wherein the scattering pattern formed on the light guide panel comprises a
plurality of convexo-concave portions formed on a surface thereof opposite to the light exit
plane of the light guide panel.
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11. The lamp according to any one of Claims 1 to 7,
wherein the scattering pattern formed on the light guide panel comprises a plurality of dots printed on a surface thereof opposite to the light exit plane of the light guide panel.
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12. The lamp according to any one of Claims 1 to 7,
wherein the scattering pattern formed on the light guide panel comprises a plurality of particulates distributed in the light guide panel.
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13. The lamp according to Claim 12,
wherein the particulates are bubbles.
14. The lamp according to any one of Claims 1 to 7,
wherein the light exit plane of the light guide panel is formed convexly.
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15. The lamp according to Claim 14, further comprising:
a second light guide panel which has a convex shape and is stacked on the light exit plane of the light guide panel,
wherein an additional light source is installed in the vicinity of a light incidence plane of the stacked second light guide panel.
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16. The lamp according to Claims 15,
wherein light-transmitting filters having specific colors are additionally installed between the light incidence planes of the light guide panels and the light sources,
25 respectively.
17. The lamp according to Claim 15 or 16,
wherein the scattering pattern formed on the light guide panel and a scattering pattern formed on the second light guide panel are provided at regions that do not overlap
30 each other.

18. The lamp according to any one of Claims 1 to 7, further comprising:
a second light guide panel stacked on the light exit plane of the light guide panel,
wherein a second light source is installed in the vicinity of a light incidence plane
5 of the stacked second light guide panel.
19. The lamp according to Claim 18,
wherein the scattering pattern formed on the light guide panel and a scattering
pattern formed on the second light guide panel are formed not to overlap each other.
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20. The lamp according to Claim 18,
wherein light-transmitting filters having specific colors are additionally installed
between the light incidence planes of the light guide panels and the light sources,
respectively.
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21. The lamp according to Claim 19,
wherein light-transmitting filters having specific colors are additionally installed
between the light incidence planes of the light guide panels and the light sources,
respectively.
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22. The lamp according to Claim 20,
wherein a portion of the light incidence plane of the cover member is formed with
a reflection pattern to reflect external light incident on the light exit plane of the cover
member.
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23. The lamp according to any one of Claims 1 to 7,
wherein a plurality of the light sources are installed in the vicinity of the light
incidence plane of the light guide panel, and light-transmitting filters having specific colors
are additionally provided between the light guide panel and the respective light sources.
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